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Carolina Water Services, Inc. Summary of Cost of Capital and Fair Rate of Return Based upon the Consolidated Capital Structure of Utilities, Inc. at December 31, 2012

Type of Capital	Ratios (1)	Cost Rate	Weighted Cost Rate
Long-Term Debt	52.44%	6.60% (1)	3.46%
Common Equity	47.56%	10.15% - 11.15% (2)	4.83% - 5.30%
Total	100.00%		8.29% - 8.76%

Notes:

- (1) Company-provided.
- (2) From page 2 of this Schedule.

<u>Carolina Water Services, Inc.</u> <u>Brief Summary of Common Equity Cost Rate</u>

No.	Principal Methods	Proxy Group of Nine Water Companies
1.	Discounted Cash Flow Model (DCF) (1)	8.62%
2.	Risk Premium Model (RPM) (2)	11.54%
3.	Capital Asset Pricing Model (CAPM) (3)	9.89%
4.	Market Models Applied to Comparable Risk, Non-Price Regulated Companies (4)	10.46%
5.	Indicated Common Equity Cost Rate before Adjustment for Business Risks	10.15%
6.	Size Adjustment (5)	0.50%
7	Indicated Common Equity Cost Rate	10.65%
8.	Recommended Range of Common Equity Cost Rates	10.15%-11.15%

Notes: (1) From Schedule 3.

- (2) From page 1 of Schedule 5.
- (3) From page 1 of Schedule 6.
- (4) From page 1 of Schedule 8.
- (5) Business risk adjustment to reflect Carolina Water Services, Inc.'s greater business risk due to its small size relative to the proxy group as detailed in Mr. D'Ascendis's accompanying direct testimony.

Proxy Group of Nine Water Companies CAPITALIZATION AND FINANCIAL STATISTICS (1) 2008 - 2012, Inclusive

	2012	<u>2011</u> (MILL	<u>2010</u> IONS OF DOLLA	<u>2009</u> RS)	2008	
CAPITALIZATION STATISTICS						
AMOUNT OF CAPITAL EMPLOYED TOTAL PERMANENT CAPITAL SHORT-TERM DEBT TOTAL CAPITAL EMPLOYED	\$1,801.379 <u>\$55.136</u> <u>\$1,856.515</u>	\$1,736.912 \$81.076 \$1,817.988	\$1,712.951 \$53.463 \$1,766.414	\$1,641.561 \$31.243 \$1,672.804	\$1,537.371 <u>\$84.104</u> <u>\$1,621.475</u>	
INDICATED AVERAGE CAPITAL COST RATES (2) TOTAL DEBT PREFERRED STOCK	5.41 % 5.53	5.36 % 5.53	5.37 % 5.54	5.31 % 5.54	5.58 % 4.32	<u>5 YEAR</u>
CAPITAL STRUCTURE RATIOS BASED ON TOTAL PERMANENT CAPITAL: LONG-TERM DEBT PREFERRED STOCK COMMON EQUITY TOTAL	49.12 % 0.16 <u>50.72</u> <u>100.00</u> %	50.69 % 0.18 <u>49.13</u> <u>100.00</u> %	50.97 % 0.19 <u>48.84</u> <u>100.00</u> %	50.80 % 0.21 <u>48.99</u> <u>100.00</u> %	50.35 % 0.22 <u>49.43</u> 100.00 %	50.39 % 0.19 49.42 100.00 %
BASED ON TOTAL CAPITAL: TOTAL DEBT, INCLUDING SHORT-TERM PREFERRED STOCK COMMON EQUITY TOTAL	50.79 % 0.15 <u>49.06</u> <u>100.00</u> %	52.55 % 0.17 <u>47.28</u> <u>100.00</u> %	53.49 % 0.18 <u>46.33</u> <u>100.00</u> %	53.33 % 0.19 <u>46.48</u> <u>100.00</u> %	53.43 % 0.21 <u>46.36</u> 100.00 %	52.72 % 0.18 <u>47.10</u> <u>100.00</u> %
FINANCIAL STATISTICS						
FINANCIAL RATIOS - MARKET BASED EARNINGS / PRICE RATIO MARKET / AVERAGE BOOK RATIO DIVIDEND YIELD DIVIDEND PAYOUT RATIO	6.45 % 166.26 3.84 61.46	6.33 % 156.32 4.09 67.87	6.38 % 150.17 4.26 66.67	4.64 % 138.52 4.72 60.06	5.91 % 155.49 4.49 73.68	5.94 % 153.35 4.28 65.95
RATE OF RETURN ON AVERAGE BOOK COMMON EQUITY	9.94 %	8.99 %	8.98 %	6.99 %	6.39 %	8.26 %
TOTAL DEBT / EBITDA (3)	3.84 X	4.34 X	4.75 X	5.53 X	9.07 X	5.51 X
FUNDS FROM OPERATIONS / TOTAL DEBT (4)	20.65 %	18.82 %	17.10 %	16.41 %	16.14 %	17.82 %
TOTAL DEBT / TOTAL CAPITAL	50.79 %	52.55 %	53.49 %	53.33 %	53.43 %	52.72 %

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group, and are based upon financial statements as originally reported in each year.
- (2) Computed by relating actual total debt interest or preferred stock dividends booked to average of beginning and ending total debt or preferred stock reported to be outstanding.
- (3) Total debt relative to EBITDA (Earnings before Interest, Income Taxes, Depreciation and Amortization).
- (4) Funds from operations (sum of net income, depreciation, amortization, net deferred income tax and investment tax credits, less total AFUDC) plus interest charges as a percentage of total debt.

Source of Information: I-Metrix Database

Company SEC Form 10-K

Capital Structure Based upon Total Permanent Capital for the Proxy Group of Nine Water Companies 2008 - 2012, Inclusive

200 2012						
	2012	<u>2011</u>	<u>2010</u>	<u>2009</u>	2008	<u>5 YEAR</u> <u>AVERAGE</u>
American States Water Co. Long-Term Debt Preferred Stock Common Equity Total Capital	42.49 % 0.00 57.51 100.00 %	45.46 % 0.00 54.54 100.00 %	44.30 % 0.00 55.70 100.00 %	46.95 % 0.00 53.05 100.00 %	46.25 % 0.00 53.75 100.00 %	45.09 % 0.00 54.91 100.00 %
American Water Works Co., Inc., Long-Term Debt Preferred Stock Common Equity Total Capital	54.30 % 0.21 45.49 100.00 %	55.72 % 0.27 44.01 100.00 %	56.73 % 0.29 42.98 100.00 %	56.98 % 0.30 42.72 100.00 %	53.75 % 0.32 45.93 100.00 %	55.49 % 0.28 44.23 100.00 %
Aqua America, Inc. Long-Term Debt Preferred Stock Common Equity Total Capital	53.41 % 0.01 46.58 100.00 %	54.11 % 0.02 45.87 100.00 %	57.05 % 0.02 42.93 100.00 %	56.59 % 0.02 43.39 100.00 %	54.21 % 0.09 45.70 100.00 %	55.08 % 0.03 44.89 100.00 %
Artesian Resources Corp. Long-Term Debt Preferred Stock Common Equity Total Capital	47.60 % 0.00 52.40 100.00 %	48.93 % 0.00 51.07 100.00 %	52.84 % 0.00 47.16 100.00 %	54.12 % 0.00 45.88 100.00 %	59.57 % 0.00 40.43 100.00 %	52.61 % 0.00 47.39 100.00 %
California Water Service Group Long-Term Debt Preferred Stock Common Equity Total Capital	50.39 % 0.00 49.61 100.00 %	52.04 % 0.00 47.96 100.00 %	52.51 % 0.00 47.49 100.00 %	47.93 % 0.00 52.07 100.00 %	41.88 % 0.00 58.12 100.00 %	48.95 % 0.00 51.05 100.00 %
Connecticut Water Service, Inc. Long-Term Debt Preferred Stock Common Equity Total Capital	49.03 % 0.21 50.76 100.00 %	53.05 % 0.30 46.65 100.00 %	49.32 % 0.34 50.34 100.00 %	50.59 % 0.35 49.06 100.00 %	46.94 % 0.39 52.67 100.00 %	49.79 % 0.32 49.89 100.00 %
Middlesex Water Company Long-Term Debt Preferred Stock Common Equity Total Capital	43.53 % 1.02 55.45 100.00 %	43.12 % 1.06 55.82 100.00 %	43.91 % 1.07 55.02 100.00 %	47.35 % 1.24 51.41 100.00 %	49.10 % 1.22 49.68 100.00 %	45.40 % 1.12 53.48 100.00 %
SJW Corporation Long-Term Debt Preferred Stock Common Equity Total Capital	55.39 % 0.00 44.61 100.00 %	56.63 % 0.00 43.37 100.00 %	53.79 % 0.00 46.21 100.00 %	49.52 % 0.00 50.48 100.00 %	46.08 % 0.00 53.92 100.00 %	52.28 % 0.00 47.72 100.00 %
York Water Company Long-Term Debt Preferred Stock Common Equity Total Capital	45.98 % 0.00 54.02 100.00 %	47.16 % 0.00 52.84 100.00 %	48.28 % 0.00 51.72 100.00 %	47.16 % 0.00 52.84 100.00 %	55.31 % 0.00 44.69 100.00 %	48.78 % 0.00 51.22 100.00 %
Proxy Group of Nine Water Companies Long-Term Debt Preferred Stock Common Equity Total Capital	49.12 % 0.16 50.72 100.00 %	50.69 % 0.18 49.13 100.00 %	50.97 % 0.19 48.84 100.00 %	50.80 % 0.21 48.99 100.00 %	50.35 % 0.22 49.43 100.00 %	50.39 % 0.19 49.42 100.00 %

Source of Information EDGAR Online's I-Metrix Database Annual Forms 10-K

<u>Carolina Water Services. Inc.</u> Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for the Proxy Group of Nine Water Companies

	1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
Proxy Group of Nine Water Companies	Average Dividend Yield (1)	Value Line Projected Five Year Growth in EPS (2)	Reuters Mean Consensus Projected Five Year Growth Rate in EPS	Zack's Five Year Projected Growth Rate in EPS	Yahoo! Finance Projected Five Year Growth in EPS	Average Projected Five Year Growth in EPS (3)	Adjusted Dividend Yield (4)	Indicated Common Equity Cost Rate (5)
American States Water Co. American Water Works Co., Inc. Aqua America, Inc. Artesian Resources Corp. California Water Service Group Connecticut Water Service, Inc. Middlesex Water Company SJW Corporation York Water Company	2.94 % 2.73 2.46 3.76 3.14 3.16 3.65 2.64 2.70	6.00 % 10.00 8.00 NA 6.50 5.50 4.00 7.50 4.00	2.00 % 8.50 7.40 NA NA 5.00 NA NA NA	2.00 % 7.20 5.30 NA 6.00 5.00 NA NA	2.00 % 7.45 5.80 4.00 6.00 5.00 2.70 14.00 4.90	3.00 % 8.29 6.63 4.00 6.17 5.13 3.35 10.75 4.45	2.98 % 2.84 2.54 3.84 3.24 3.24 3.71 2.78 2.76	5.98 % 11.13 9.17 7.84 9.41 8.37 7.06 13.53 7.21
							Average	8.86 %
							Median	8.37 %
					Average of Ave	erage and Media	ın Results:	8.62 %

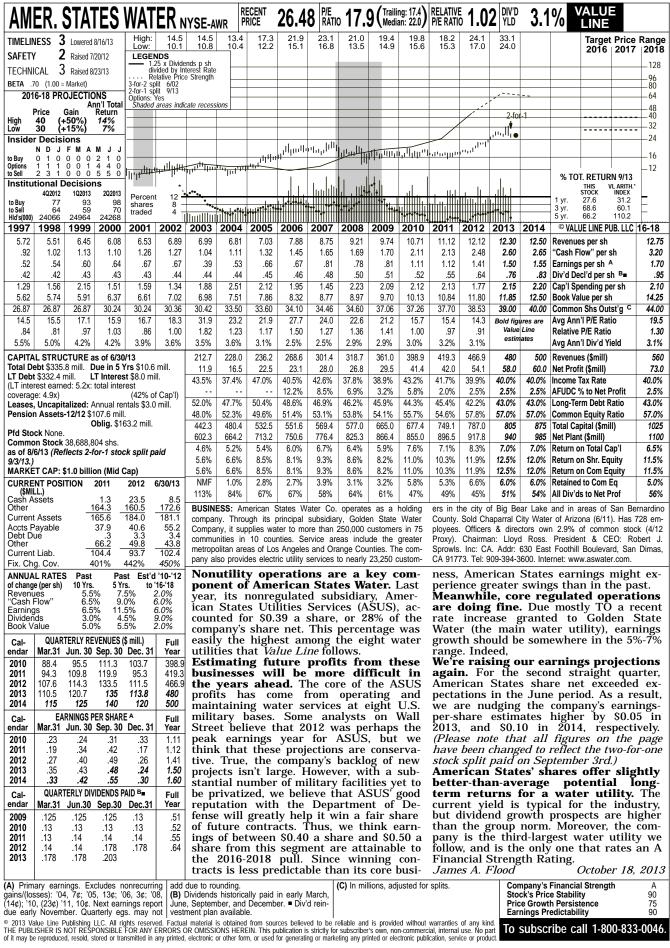
NA= Not Available NMF = Not Meaningful Figure

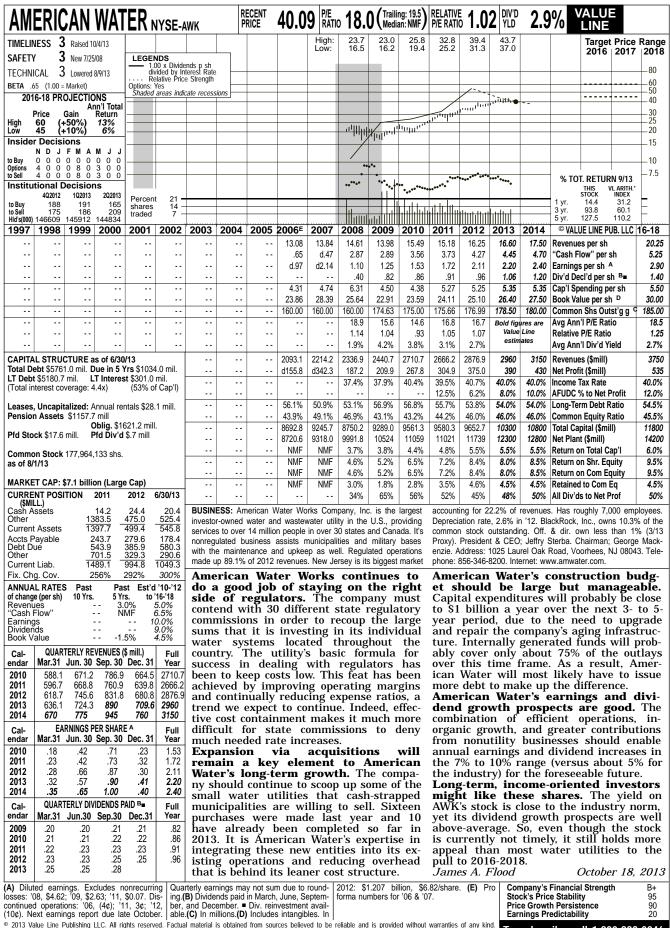
Notes:

- (1) Indicated dividend at 10/31/2013 divided by the average closing price of the last 60 trading days ending 10/31/2013 for each company.
- (2) From pages 2 through 10 of this Schedule.
- (2) From pages 2 through 10 of this Schedule.
 (3) Average of columns 2 through 5 excluding negative growth rates.
 (4) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 6) x column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for American States Water Co., 2.94% x (1+(1/2 x 3.00%)) = 2.98%.
- (5) Column 6 + column 7.

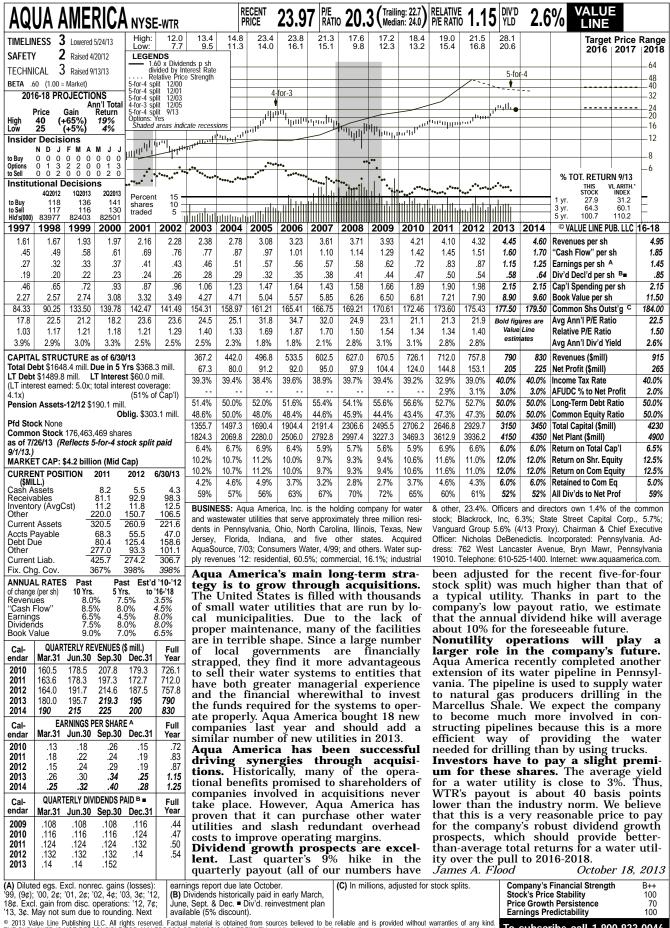
Source of Information:

Value Line Investment Survey www.reuters.com Downloaded on 11/01/2013 www.zacks.com Downloaded on 11/01/2013 www.yahoo.com Downloaded on 11/01/2013

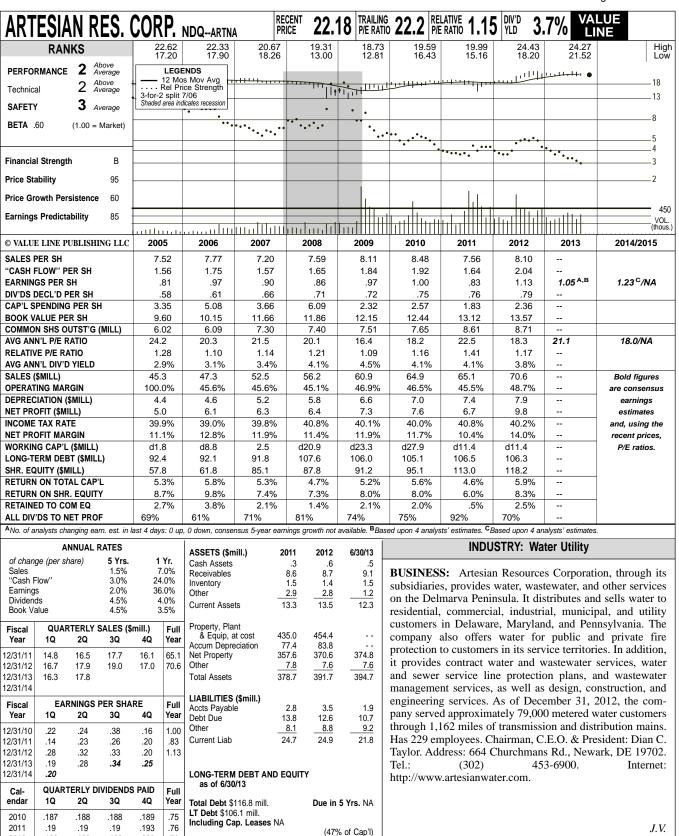




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Common Stock 8,781,642 shares

Pfd Stock None

Leases, Uncapitalized Annual rentals NA

Pension Liability \$.4 mill. in '12 vs. \$.5 mill. in '11

Pfd Div'd Paid None

(53% of Cap'l)

.193

.203

2012

2013

to Buy

to Sell

Hld's(000)

.198

.206

INSTITUTIONAL

4Q'12

28

32

3052

.198

.206

DECISIONS

1Q'13

32

26

3036

.203 .79

.209

2Q'13

31

30

3029

Dividends plus appreciation as of 9/30/2013

5 Yrs.

63.01%

3 Yrs.

October 18, 2013

1 Yr.

-0.68%

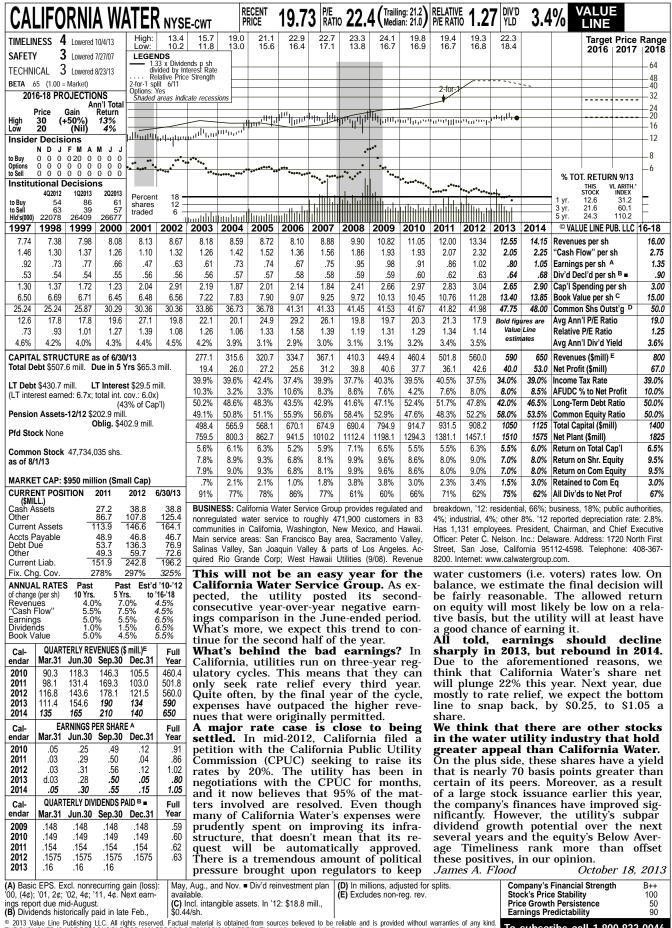
TOTAL SHAREHOLDER RETURN

6 Mos.

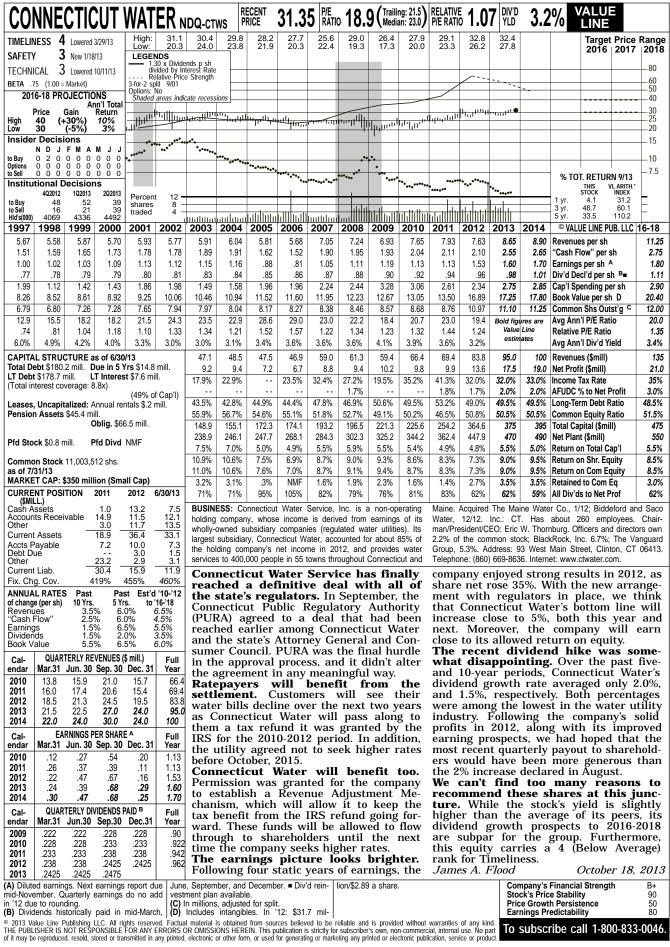
0.84%

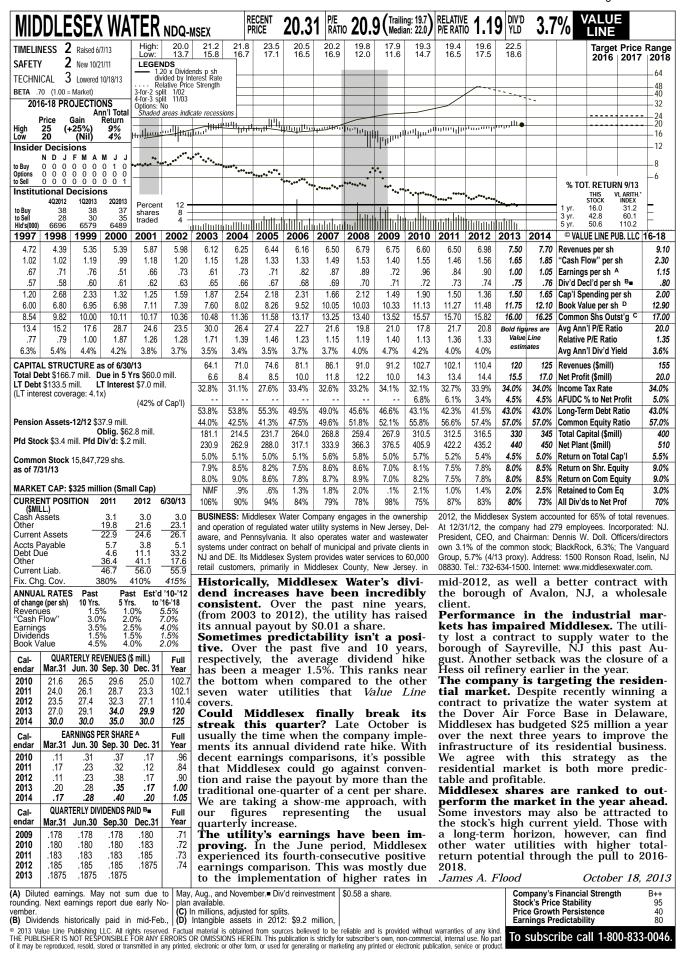
3 Mos.

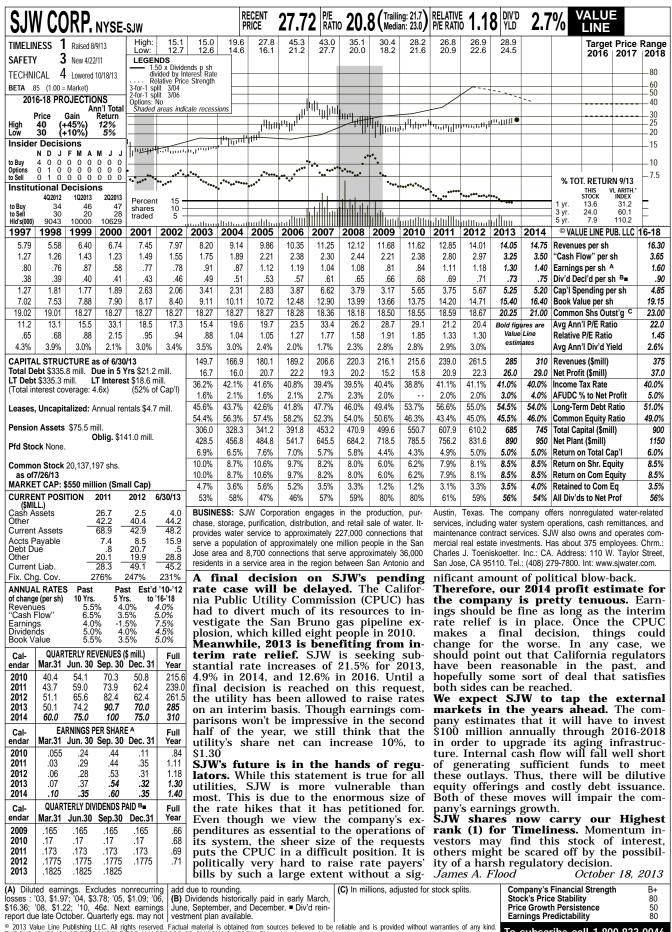
0.79%

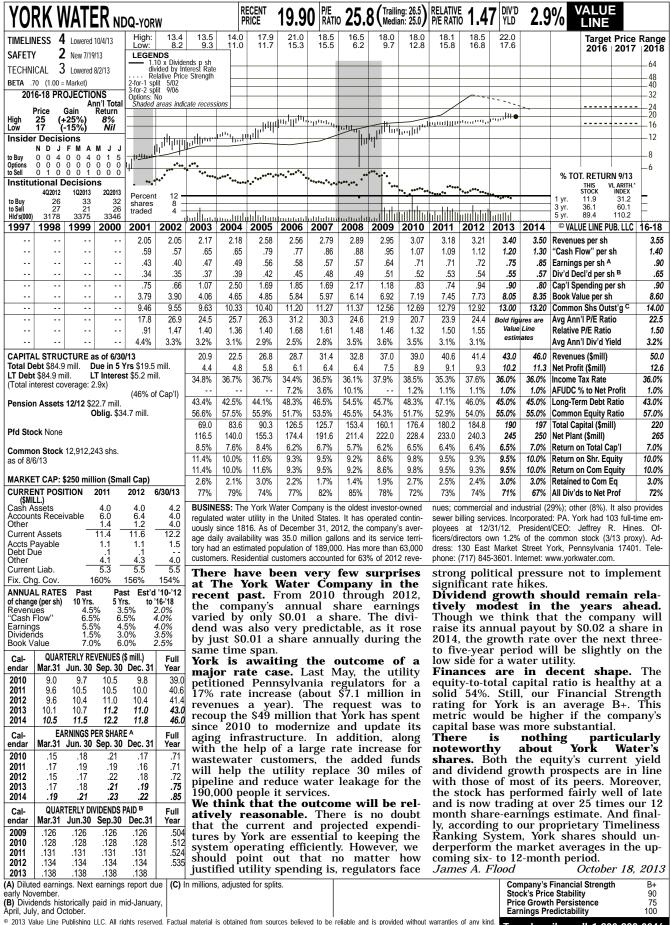


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Carolina Water Services, Inc. Current Institutional Holdings and Individual Holdings the Proxy Group of Nine Water Companies

	<u>1</u>	<u>2</u>
	October 31, 2013 Percentage of Institutional Holdings	October 31, 2013 Percentage of Individual Holdings (1)
Proxy Group of Nine Water		
Companies		
American States Water Co.	62.12 %	37.88 %
American Water Works Co., Inc.	81.96	18.04
Aqua America, Inc.	47.24	52.76
Artesian Resources Corp.	37.90	62.10
California Water Service Group	56.98	43.02
Connecticut Water Service, Inc.	41.63	58.37
Middlesex Water Company	39.10	60.90
SJW Corporation	52.89	47.11
York Water Company	26.08	73.92
Average	<u>49.54</u> %	50.46 %

Notes:

(1) (1 - column 1).

Source of Information: pro.edgar-online.com, October 31, 2013

<u>Carolina Water Services, Inc.</u> Summary of Risk Premium Models for the <u>Proxy Group of Nine Water Companies</u>

		Proxy Group of Nine Water Companies
Predictive Risk Premium Model ™ (PRPM™) (1)		12.07 %
Risk Premium Using an Adjusted Market Approach (2)		9.96 %
, pp. 64611 (2)	Average	11.54 %

Notes:

- (1) From page 2 of this Schedule.
- (2) From page 3 of this Schedule.

Carolina Water Services, Inc.
Derivation of Common Equity Cost Rate
Using the Predictive Risk Premium Model TM (PRPM TM)
Proxy Group of Nine Water Companies (1)

York Water Company	1.946299283	0.46%	11.40%	4.31%	15.71%	12.65%	11.48%	12.07%
SJW Corporation	1.337948339	0.42%	6.97%	4.31%	11.28%	Average	Median	nd Median Results:
Middlesex Water Company	1.972679422	0.27%	6.56%	4.31%	10.87%			Average of Average and Median Results:
Connecticut Water Service, Inc.	1.73798	0.29%	6.11%	4.31%	10.42%			
California Water Service Group	1.75823285	0.31%	6.81%	4.31%	11.12%			
Artesian Resources Corp.	2.117502072	0.30%	8.02%	4.31%	12.33%			
Aqua America, Inc.	2.221510553	0.48%	13.51%	4.31%	17.82%			
American Water Works Co., Inc.	4.769091604	0.28%	17.45%	4.31%	ΝΑ			
American States Water Co.	1.516803327	0.39%	7.37%	4.31%	11.68%			
	GARCH Coefficient (2)	Average Variance (2)	PRPM™ Derived Risk Premium (2)	Risk-Free Rate (3)	Indicated Cost of Common Equity			

(1) PRPMTM calculated from first available trading month through September 2013. (2) Based upon data from CRSP^{R)} Data [©] 2012, Center For Research in Security Prices (CRSP^{R)}), The University of Chicago Booth School of Business. (3) From note 3 on page 2 of Schedule 6.

Carolina Water Services, Inc. Indicated Common Equity Cost Rate Through Use of a Risk Premium Model Using an Adjusted Total Market Approach

Line No.			Proxy Group of Nine Water Companies
1.		Prospective Yield on Aaa Rated Corporate Bonds (1)	5.08 %
2.		Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A Rated Public Utility Bonds	<u> </u>
3.		Adjusted Prospective Yield on A Rated Public Utility Bonds	5.31 %
4.		Adjustment to Reflect Bond Rating Difference of Proxy Group	-0.04 (3)
5.		Adjusted Prospective Bond Yield	5.27 %
6.		Equity Risk Premium (4)	4.69
7.		Risk Premium Derived Common Equity Cost Rate	9.96 %
Notes:	(1)	Average consensus forecast of Moody's Aaa Rabonds from Blue Chip Financial Forecasts (see this Schedule).	Telephone in the contract of t
	(2)	The average yield spread of A rated public utility rated corporate bonds of 0.23% from page 6 of	
	(3)	Adjustment to reflect the A1/A2 Moody's bond ragroup of nine water companies as shown on pa Schedule. The 4 basis point adjustment is derive the spread between Aa2 and A2 Public Utility E 0.04%).	ge 4 of this red by taking 1/6 of
		0.0770).	

(4) From page 7 of this Schedule.

Carolina Water Services, Inc. Comparison of Bond Ratings for the Proxy Group of Nine Water Companies

		Moody's		ard & Poor's
	Bo	nd Rating	Bor	nd Rating
	Nove	ember 2013	Nove	mber 2013
Proxy Group of Nine Water Companies	Bond Rating	Numerical Weighting (1)	Bond Rating	Numerical Weighting (1)
American States Water Co. (2)	A2	6.0	A+	5.0
American Water Works Co., Inc. (3)	A1	5.0	Α	6.0
Aqua America, Inc. (4)	NR		AA-	4.0
Artesian Resources Corp.	NR		NR	
California Water Service Group (5)	NR		AA-	4.0
Connecticut Water Service, Inc. (6)	NR		Α	6.0
Middlesex Water Company	NR		Α	6.0
SJW Corporation (7)	NR		Α	6.0
York Water Company	NR		A-	7.0
Average	A1/A2	5.5	A+/A	5.5

Notes:

- (1) From page 5 of this Schedule.
- (2) Ratings are those of Golden State Water Company.
- (3) Rating are those of Pennsylvania and New Jersey American Water.
- (4) Ratings are those of Aqua Pennsylvania, Inc.
- (5) Ratings are those of California Water Service Co.
- (6) Ratings are those of Connecticut Water Company.
- (7) Ratings are those of San Jose Water Co.

Source Information: Moody's Investors Service Standard & Poor's Global Utilities Rating Service

Numerical Assignment for Moody's and Standard & Poor's Bond Ratings

Moody's Bond Rating	Numerical Bond Weighting	Standard & Poor's <u>Bond Rating</u>
Aaa	1	AAA
Aa1 Aa2 Aa3 A1	2 3 4 5	AA+ AA AA-
A2	6	A
A3	7	A-
Baa1	8	BBB+
Baa2	9	BBB
Baa3	10	BBB-
Ba1	11	BB+
Ba2	12	BB
Ba3	13	BB-

Moodv's
Comparison of Interest Rate Trends
for the Three Months Ending September 2013 (1)

Spread - Public Utility Bonds		Baa over A				0.53 %
Spread - Pub		A over Aa				0.22 %
Jtility Bonds	Util.) over	Ааа (Согр.)				% 92.0
Spread - Corporate v. Public Utility Bonds	over Aaa	(Corp.)				0.23 %
Spread - Co	over Aaa	(Corp.)				0.01 %
	10	Baa Rated	5.31 %	5.28	5.21	5.27 %
	Public Utility Bonds	A Rated	4.80 %	4.73	4.68	4.74 %
		Aa Rated	4.58 %	4.53	4.44	4.52 %
otorog	Bonds	Aaa Rated	4.64 %	4.54	4.34	4.51 %
		Months	September-13	August-13	July-13	Average of Last 3 Months

Notes: (1) All yields are distributed yields.

Source of Information: Mergent Bond Record, October 2013, Vol. 80, No. 10.

Carolina Water Services, Inc. Judgment of Equity Risk Premium for the Proxy Group of Nine Water Companies

		Proxy Group of
Line		Nine Water
No.		Companies
1.	Calculated equity risk premium based on the total market using the beta approach (1)	4.67 %
2.	Mean equity risk premium based on a study using the holding period returns of public utilities with A rated bonds (2)	4.70
3.	Average equity risk premium	4.69 %
Notes:	(1) From page 8 of this Schedule.(2) From page 11 of this Schedule.	

Carolina Water Services, Inc. Derivation of Equity Risk Premium Based on the Total Market Approach Using the Beta for the Proxy Group of Nine Water Companies

Line No.		Proxy Group of Nine Water Companies
	Based on SBBI Valuation Yearbook Data:	
1.	Ibbotson Equity Risk Premium (1)	5.60 %
2.	Ibbotson Equity Risk Premium based on PRPM TM (2)	9.22
	Based on Value Line Summary and Index:	
3.	Equity Risk Premium Based on <u>Value Line</u> Summary and Index (3)	5.19
4.	Conclusion of Equity Risk Premium (4)	6.67 %
5.	Adjusted Value Line Beta (5)	0.70
6	Beta Adjusted Equity Risk Premium	4.67 %

Notes:

- (1) Based on the arithmetic mean historical monthly returns on large company common stocks from Ibbotson[®] SBBI[®] 2013 Valuation Yearbook Market Results for Stocks, Bonds, Bills, and Inflation minus the arithmetic mean monthly yield of Moody's Aaa and Aa corporate bonds from 1926 2012. (11.83% 6.23% = 5.60%).
- (2) The Predictive Risk Premium Model (PRPMTM) is discussed in Mr.D'Ascendis's accompanying direct testimony. The Ibbotson equity risk premium based on the PRPMTM is derived by applying the PRPMTM to the monthly risk premiums between Ibbotson large company common stock monthly returns minus the average Aaa and Aa corporate monthly bond yields, from January 1928 through September 2013.
- (3) The equity risk premium based on the Value Line Summary and Index is derived from taking the projected 3-5 year total annual market return of 10.27% (described fully in note 1 of page 2 of Schedule 6) and subtracting the average consensus forecast of Aaa corporate bonds of 5.08% (Shown on page 3 of this Schedule). (10.27% 5.08% = 5.19%).
- (4) Average of Lines 1, 2, & 3.
- (5) Median beta derived from page 1 of Schedule 6.

Sources of Information:

<u>Ibbotson[®] SBBI[®] 2013 Valuation Yearbook - Market Results for Stocks, Bonds, Bills, and Inflation, Morningstar, Inc., 2013 Chicago, IL.</u> Industrial Manual and Mergent Bond Record Monthly Update.

Value Line Summary and Index

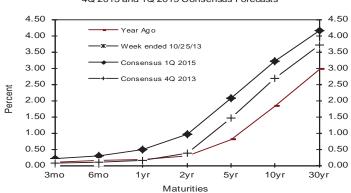
Blue Chip Financial Forecasts, June 1 and November 1, 2013

Consensus Forecasts Of U.S. Interest Rates And Key Assumptions¹

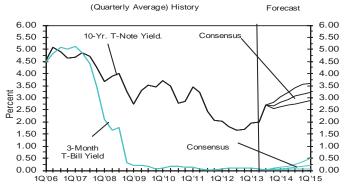
	History				Cons	ensus l	Forecas	sts-Qua	arterly	Avg.				
	Av	erage For	Week End	ling	Avei	rage For N	Ionth	Latest Q	4Q	1Q	2Q	3Q	4Q	1Q
Interest Rates	Oct. 25	Oct. 18	Oct. 11	Oct. 4	Sep.	Aug.	<u>July</u>	3Q 2013	<u>2013</u>	2014	2014	2014	2014	<u>2015</u>
Federal Funds Rate	0.09	0.10	0.08	0.08	0.08	0.08	0.09	0.08	0.1	0.1	0.2	0.2	0.2	0.2
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.3	3.3	3.3	3.3	3.3	3.3
LIBOR, 3-mo.	0.24	0.24	0.24	0.24	0.25	0.26	0.27	0.26	0.3	0.3	0.3	0.3	0.4	0.4
Commercial Paper, 1-mo.	0.06	0.11	0.10	0.05	0.05	0.05	0.06	0.05	0.1	0.1	0.1	0.2	0.2	0.3
Treasury bill, 3-mo.	0.04	0.08	0.05	0.02	0.02	0.04	0.04	0.03	0.1	0.1	0.1	0.1	0.2	0.2
Treasury bill, 6-mo.	0.07	0.11	0.07	0.04	0.04	0.07	0.07	0.06	0.1	0.1	0.1	0.2	0.2	0.3
Treasury bill, 1 yr.	0.11	0.14	0.14	0.11	0.12	0.13	0.12	0.12	0.1	0.2	0.2	0.3	0.4	0.5
Treasury note, 2 yr.	0.32	0.34	0.37	0.33	0.40	0.36	0.34	0.37	0.4	0.4	0.6	0.7	0.8	1.0
Treasury note, 5 yr.	1.34	1.39	1.43	1.39	1.60	1.52	1.40	1.51	1.4	1.6	1.7	1.8	1.9	2.1
Treasury note, 10 yr.	2.58	2.66	2.68	2.64	2.81	2.74	2.58	2.71	2.7	2.8	2.9	3.1	3.2	3.2
Treasury note, 30 yr.	3.64	3.70	3.72	3.71	3.79	3.76	3.61	3.72	3.7	3.8	3.9	4.0	4.1	4.2
Corporate Aaa bond	4.48	4.55	4.58	4.58	4.64	4.54	4.34	4.51	4.5	4.6	4.7	4.8	4.9	5.0
Corporate Baa bond	5.24	5.32	5.38	5.41	5.47	5.42	5.32	5.40	5.4	5.5	5.6	5.7	5.8	5.9
State & Local bonds	4.56	4.68	4.57	4.53	4.79	4.82	4.56	4.72	4.6	4.6	4.7	4.8	4.8	4.9
Home mortgage rate	4.13	4.28	4.23	4.22	4.49	4.46	4.37	4.44	4.4	4.5	4.6	4.7	4.8	4.9
				Histor	ry				Co	nsensu	ıs Fore	casts-()uartei	rly
	4Q	1Q	2Q	3Q	4Q	1Q	1Q	3Q*	4Q	1Q	2Q	3Q	4Q	1Q
Key Assumptions	2011	2012	2012	2012	2012	2013	2013	2013	2013	2014	2014	2014	2014	2015
Major Currency Index	72.4	72.9	73.9	74.0	73.2	74.7	76.4	76.6	75.7	75.8	76.3	76.6	77.0	77.0
Real GDP	4.9	3.7	1.2	2.8	0.1	1.1	2.5	2.1	2.1	2.7	2.8	2.8	2.9	3.0
GDP Price Index	0.5	2.0	1.8	2.3	1.1	1.3	0.6	1.7	1.7	1.8	1.8	1.9	2.0	2.0
Consumer Price Index	1.4	2.3	1.0	2.1	2.2	1.4	0.0	2.1	1.7	1.9	1.9	2.2	2.1	2.2

Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index and Consumer Price Index are seasonally-adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data for interest rates except LIBOR is from Federal Reserve Release (FRSR) H.15. LIBOR quotes available from *The Wall Street Journal*. Interest rate definitions are same as those in FRSR H.15. Treasury yields are reported on a constant maturity basis. Historical data for Fed's Major Currency Index is from FRSR H.10 and G.5. Historical data for Real GDP and GDP Chained Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index (CPI) history is from the Department of Labor's Bureau of Labor Statistics (BLS). *Figures for 3Q 2013 Real GDP, the GDP Chained Price Index and the Consumer Price Index are consensus forecasts based on a special question asked of the panelists' this month.*

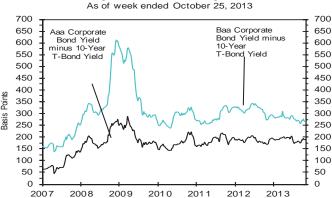
U.S. Treasury Yield Curve Week ended October 25, 2013 and Year Agovs. 4Q 2013 and 1Q 2015 Consensus Forecasts



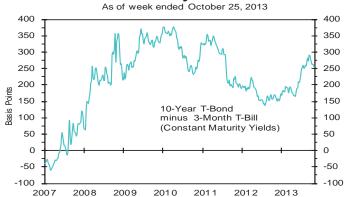
U.S. 3-Mo. T-Bills & 10-Yr. T-Note Yield







U.S. Treasury Yield Curve



Long-Range Forecasts:

The table below contains results of our semi-annual long-range CONSENSUS survey. There are also Top 10 and Bottom 10 averages for each variable. Shown are estimates for the years 2015 through 2019 and averages for the five-year periods 2015-2019 and 2020-2024. Apply these projections cautiously. Few economic, demographic and political forces can be evaluated accurately over such long time spans.

			Avera	age For Th	e Year		Five-Year	Averages
Interest Rates		2015	2016	2017	2018	2019	2015-2019	2020-2024
1. Federal Funds Rate	CONSENSUS	0.8	2.0	3.1	3.6	3.9	2.7	3.8
	Top 10 Average	1.6	3.4	4.3	4.4	4.6	3.7	4.6
	Bottom 10 Average	0.2	0.8	1.7	2.5	3.1	1.7	2.9
2. Prime Rate	CONSENSUS	3.9	5.1	6.1	6.6	6.9	5.7	6.8
	Top 10 Average	4.7	6.5	7.3	7.6	7.6	6.7	7.5
	Bottom 10 Average	3.3	3.9	4.8	5.5	6.1	4.7	6.0
3. LIBOR, 3-Mo.	CONSENSUS	1.1	2.4	3.3	3.9	4.1	3.0	4.1
	Top 10 Average	2.0	3.8	4.6	4.8	4.9	4.0	4.9
	Bottom 10 Average	0.5	1.1	2.0	2.8	3.3	1.9	3.0
4. Commercial Paper, 1-Mo.	CONSENSUS	1.0	2.3	3.2	3.7	3.9	2.8	3.7
* '	Top 10 Average	1.7	3.4	4.3	4.5	4.6	3.7	4.5
	Bottom 10 Average	0.5	1.2	2.1	2.8	3.1	1.9	2.8
5. Treasury Bill Yield, 3-Mo.	CONSENSUS	0.9	2.0	3.1	3.5	3.8	2.7	3.7
	Top 10 Average	1.7	3.4	4.3	4.5	4.6	3.7	4.5
	Bottom 10 Average	0.2	0.8	1.7	2.4	2.9	1.6	2.7
6. Treasury Bill Yield, 6-Mo.	CONSENSUS	1.0	2.2	3.2	3.7	3.9	2.8	3.9
	Top 10 Average	1.8	3.5	4.4	4.7	4.7	3.8	4.6
	Bottom 10 Average	0.3	1.0	1.8	2.6	3.0	1.7	2.8
7. Treasury Bill Yield, 1-Yr.	CONSENSUS	1.2	2.4	3.3	3.8	4.0	2.9	4.0
	Top 10 Average	2.1	3.6	4.5	4.8	4.9	4.0	4.8
	Bottom 10 Average	0.4	1.1	1.9	2.7	3.1	1.9	3.0
8. Treasury Note Yield, 2-Yr.	CONSENSUS	1.6	2.7	3.6	4.1	4.2	3.2	4.2
	Top 10 Average	2.4	3.8	4.7	5.0	5.1	4.2	5.0
	Bottom 10 Average	0.8	1.6	2.4	3.0	3.3	2.2	3.1
10. Treasury Note Yield, 5-Yr.	CONSENSUS	2.3	3.3	4.1	4.4	4.6	3.8	4.5
	Top 10 Average	3.2	4.4	5.1	5.3	5.5	4.7	5.3
	Bottom 10 Average	1.5	2.3	3.1	3.4	3.6	2.8	3.5
11. Treasury Note Yield, 10-Yr.	CONSENSUS	3.2	4.1	4.6	4.9	5.0	4.4	4.9
	Top 10 Average	4.0	5.0	5.5	5.8	5.9	5.3	5.7
	Bottom 10 Average	2.5	3.2	3.6	3.8	4.0	3.4	4.0
12. Treasury Bond Yield, 30-Yr.	CONSENSUS	4.2	4.8	5.4	5.6	5.7	5.2	5.6
	Top 10 Average	5.0	5.9	6.4	6.6	6.8	6.1	6.5
	Bottom 10 Average	3.5	3.9	4.4	4.6	4.7	4.2	4.7
Corporate Aaa Bond Yield	CONSENSUS	4.9	5.5	6.0	6.2	6.3	5.8	6.3
	Top 10 Average	5.6	6.5	7.0	7.1	7.3	6.7	7.1
	Bottom 10 Average	4.1	4.5	5.1	5.3	5.4	4.9	5.4
Corporate Baa Bond Yield	CONSENSUS	5.8	6.6	7.1	7.4	7.5	6.9	7.4
	Top 10 Average	6.6	7.6	8.0	8.3	8.5	7.8	8.3
	Bottom 10 Average	5.1	5.6	6.2	6.4	6.5	5.9	6.5
14. State & Local Bonds Yield	CONSENSUS	4.4	5.1	5.5	5.6	5.7	5.2	5.6
	Top 10 Average	5.2	6.1	6.5	6.5	6.6	6.2	6.4
	Bottom 10 Average	3.8	4.1	4.6	4.7	4.9	4.4	4.8
15. Home Mortgage Rate	CONSENSUS	4.8	5.6	6.2	6.4	6.5	5.9	6.5
	Top 10 Average	5.7	6.6	7.1	7.4	7.4	6.8	7.3
	Bottom 10 Average	4.1	4.6	5.1	5.4	5.5	5.0	5.5
A. FRB - Major Currency Index	CONSENSUS	78.6	79.1	79.3	79.6	79.6	79.2	80.0
	Top 10 Average	82.7	83.7	84.7	85.2	85.3	84.3	85.9
	Bottom 10 Average	74.4	74.2	73.9	73.9	74.1	74.1	74.2
			Year-O	ver-Year, %	6 Change		Five-Year	Averages
		2015	2016	2017	2018	2019	2015-2019	2020-2024
B. Real GDP	CONSENSUS	3.0	2.9	2.8	2.7	2.6	2.8	2.5
	Top 10 Average	3.5	3.3	3.2	3.1	3.1	3.2	2.9
	Bottom 10 Average	2.6	2.6	2.4	2.3	2.3	2.4	2.2
C. GDP Chained Price Index	CONSENSUS	2.1	2.1	2.2	2.2	2.2	2.1	2.2
	Top 10 Average	2.4	2.5	2.6	2.6	2.6	2.5	2.5
	Bottom 10 Average	1.6	1.7	1.8	1.8	1.8	1.7	1.9
D. Consumer Price Index	CONSENSUS	2.3	2.4	2.4	2.4	2.4	2.4	2.4
	Top 10 Average	2.7	2.8	2.9	2.9	2.9	2.8	2.8
	Bottom 10 Average	1.8	1.9	1.8	1.9	2.0	1.9	2.0
	<u> </u>							

Carolina Water Services, Inc. Derivation of Mean Equity Risk Premium Based on a Study <u>Using Holding Period Returns of Public Utilities</u>

Line No.			Over A Rated Moody's Public Utility Bonds - AUS Consultants Study (1)
1.		Arithmetic Mean Holding Period Returns on the Standard & Poor's Utility Index 1926- 2012 (2):	10.69 %
2.		Arithmetic Mean Yield on Moody's A Rated Public Utility Yields 1926-2012	(6.53)
3.		Historical Equity Risk Premium	4.16 %
4.		Forecasted Equity Risk Premium Based on PRPM TM (3)	5.24
5.		Average of Historical and PRPM [™] Equity Risk Premium	4.70 %
Notes:	(1)	Based on S&P Public Utility Index monthly total returns an Utility Bond average monthly yields from 1928-2012, (AUS	•
	(2)	Holding period returns are calculated based upon income and interest) plus the relative change in the market value cone-year holding period.	·
	(3)	The Predictive Risk Premium Model (PRPM TM) is applied the monthly total returns of the S&P Utility Index and the moody's A rated public utility bonds from 1928 - 2012.	

Carolina Water Services, Inc. Indicated Common Equity Cost Rate Through Use of the Traditional Capital Asset Pricing Model (CAPM) and Empirical Capital Asset Pricing Model (ECAPM)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
Proxy Group of Nine Water Companies	Value Line Adjusted Beta	Market Risk Premium (1)	Risk-Free Rate (2)	Traditional CAPM Cost Rate (3)	ECAPM Cost Rate (4)	Indicated Common Equity Cost Rate (5)	
American States Water Co.	0.70	7.61 %	4.31 %	9.64 %	10.21 %		
American Water Works Co., Inc.	0.65	7.61	4.31	9.26	9.92		
Aqua America, Inc.	0.60	7.61	4.31	8.88	9.64		
Artesian Resources Corp.	0.60	7.61	4.31	8.88	9.64		
California Water Service Group	0.65	7.61	4.31	9.26	9.92		
Connecticut Water Service, Inc.	0.75	7.61	4.31	10.02	10.49		
Middlesex Water Company	0.70	7.61	4.31	9.64	10.21		
SJW Corporation	0.85	7.61	4.31	10.78	11.06		
York Water Company	0.70	7.61	4.31	9.64	10.21		
Average	0.69			<u>9.55</u> %	<u>10.14</u> %	9.85 %	
Median	0.70			9.64 %	10.21 %	9.93 %	
Average of Average and Median Results:							

See page 2 for notes.

Carolina Water Services, Inc. Development of the Market-Required Rate of Return on Common Equity Using the Capital Asset Pricing Model for the Proxy Group of Nine Water Companies

Adjusted to Reflect a Forecasted Risk-Free Rate and Market Return

Notes:

(1) For reasons explained in Mr. D'Ascendis' accompanying direct testimony, from the 13 weeks ending November 1, 2013, Value Line Summary & Index, a forecasted 3-5 year total annual market return of 10.27% can be derived by averaging the 13 weeks ending November 1, 2013 forecasted total 3-5 year total appreciation, converting it into an annual market appreciation and adding the Value Line average forecasted annual dividend yield.

The 3-5 year average total market appreciation of 37% produces a four-year average annual return of 8.19% ((1.37^{0.25}) -1). When the average annual forecasted dividend yield of 2.08% is added, a total average market return of 10.27% (2.08% + 8.19%) is derived.

The 13 weeks ending November 1, 2013 forecasted total market return of 10.27% minus the risk-free rate of 4.31 (developed in Note 2) is 5.96% (10.27% - 4.31%).

The Predictive Risk Premium Model (PRPMTM) market equity risk premium of 10.32% is derived by applying the PRPMTM to the monthly equity risk premium of large company common stocks over the income return on long-term U.S. Government Securities from January 1926 through September 2013.

The Morningstar, Inc. (Ibbotson Associates) calculated arithmetic mean monthly market equity risk premium of 6.55% for the period 1926-2012 results from a total market return of 11.83% less the arithmetic mean income return on long-term U.S. Government Securities of 5.28% (11.83% - 5.28% = 6.55%).

These three expectational risk premiums are then averaged, resulting in a 7.61% market equity risk premium, which is then multiplied by the beta in column 1 of page 1 of this Schedule. ((5.96% + 10.32% + 6.55%)/3).

For reasons explained in Mr. D'Ascendis' direct testimony, the risk-free rate that he relies upon for his CAPM analysis is the (2) average forecast of 30-year Treasury Note yields per the consensus of nearly 50 economists reported in the Blue Chip Financial Forecasts dated June 1 and November 1, 2013 (see pages 9 & 10 of Schedule 5). The estimates are detailed

	<u>30-Year</u>
	Treasury Note Yield
Fourth Quarter 2013	3.70%
First Quarter 2014	3.80%
Second Quarter 2014	3.90%
Third Quarter 2014	4.00%
Fourth Quarter 2014	4.10%
First Quarter 2015	4.20%
2015 – 2019	5.20%
2020 – 2024	<u>5.60%</u>
Average	<u>4.31%</u>

(3) The traditional Capital Asset Pricing Model (CAPM) is applied using the following formula:

$$R_S = R_F + \beta (R_M - R_F)$$

Where R_S = Return rate of common stock

R_F = Risk Free Rate

β = Value Line Adjusted Beta

R_M = Return on the market as a whole

(4) The empirical CAPM is applied using the following formula:

$$R_S = R_F + .25 (R_M - R_F) + .75 \beta (R_M - R_F)$$

Where R_S = Return rate of common stock

R_F = Risk-Free Rate

β = Value Line Adjusted Beta

R_M = Return on the market as a whole

Source of Information: Value Line Summary & Index

Blue Chip Financial Forecasts, June 1 & November 1, 2013

Value Line Investment Survey. (Standard Edition) 2013 lbbotson® SBBI® Valuation Yearbook, Morningstar, Inc., 2013, Chicago, IL

Basis of Selection of the Group of Non-Price Regulated Companies Comparable in Total Risk to the Proxy Group of Nine Water Companies

The criteria for selection of the proxy group of twenty-eight non-price regulated companies was that the non-price regulated companies be domestic and reported in Value Line Investment Survey (Standard Edition).

The proxy group of twenty-eight non-price regulated companies were then selected based upon the unadjusted beta range of 0.36 - 0.60 and standard error of the regression range of 2.6728 - 3.1880 of the water proxy group.

These ranges are based upon plus or minus two standard deviations of the unadjusted beta and standard error of the regression. Plus or minus two standard deviations captures 95.50% of the distribution of unadjusted betas and standard errors of the regression.

The standard deviation of the water industry's standard error of the regression is 0.1288. The standard deviation of the standard error of the regression is calculated as follows:

Standard Deviation of the Std. Err. of the Regr. =
$$\frac{\text{Standard Error of the Regression}}{\sqrt{2N}}$$

where: N = number of observations. Since Value Line betas are derived from weekly price change observations over a period of five years, N = 259

Thus,
$$0.1288 = \frac{2.9304}{\sqrt{518}} = \frac{2.9304}{22.7596}$$

Source of Information: Value Line, Inc., June 15, 2013

Value Line Investment Survey (Standard Edition)

<u>Carolina Water Services, Inc.</u> Basis of Selection of Comparable Risk <u>Domestic Non-Price Regulated Companies</u>

Proxy Group of Nine Water Companies American States Water Co. American Water Works Co., Inc. Aqua America, Inc. Artesian Resources Corp. California Water Service Group Connecticut Water Service, Inc. Middlesex Water Company SJW Corporation York Water Company Average	Value Line Adjusted Beta 0.70 0.65 0.60 0.60 0.65 0.75 0.70 0.85 0.70 0.69	Unadjusted Beta 0.50 0.44 0.34 0.32 0.42 0.57 0.54 0.71 0.48 0.48	Residual Standard Error of the Regression 3.2189 2.9445 2.5371 2.7526 2.5635 3.1136 2.6524 3.4897 3.1012 2.9304	Standard Deviation of Beta 0.0635 0.0581 0.0501 0.0543 0.0506 0.0614 0.0523 0.0689 0.0612 0.0578
Beta Range (+/- 2 std. Devs. of Beta) 2 std. Devs. of Beta	0.36 0.12	0.60		
Residual Std. Err. Range (+/- 2 std. Devs. of the Residual Std. Err.)	2.6728	3.1880		
Std. dev. of the Res. Std. Err.	0.1288			
2 std. devs. of the Res. Std. Err.	0.2576			

Carolina Water Services, Inc. Proxy Group of Non-Price Regulated Companies Comparable in Total Risk to the Proxy Group of Nine Water Companies

Proxy Group of Twenty-Eight Non- Price-Regulated Companies	VL Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta
Actavis, Inc.	0.70	0.54	3.1788	0.0627
Gallagher (Arthur J.)	0.75	0.57	2.9036	0.0573
AutoZone Inc.	0.65	0.40	2.9262	0.0577
Baxter Intl Inc.	0.70	0.50	2.8955	0.0571
Bristol-Myers Squibb	0.70	0.47	2.7937	0.0551
Brown & Brown	0.70	0.54	2.8096	0.0554
ConAgra Foods	0.65	0.41	2.7349	0.0540
Capitol Fed. Finl	0.60	0.39	2.9201	0.0576
Dun & Bradstreet	0.75	0.59	2.9549	0.0583
DaVita Inc.	0.65	0.46	2.7897	0.0550
J&J Snack Foods	0.70	0.50	3.0927	0.0610
Kroger Co.	0.60	0.36	2.8340	0.0559
Lancaster Colony	0.70	0.53	2.9432	0.0581
McKesson Corp.	0.75	0.59	3.1375	0.0619
Mercury General	0.65	0.47	3.0619	0.0604
Annaly Capital Mgmt.	0.65	0.41	2.9250	0.0577
Northwest Bancshares	0.75	0.58	2.9835	0.0589
Owens & Minor	0.75	0.56	3.0574	0.0603
Peoples United Finl	0.65	0.45	2.7599	0.0545
Raytheon Co.	0.75	0.55	2.7110	0.0535
SAIC, Inc.	0.70	0.48	2.7054	0.0534
Sherwin-Williams	0.65	0.46	2.9720	0.0586
Smucker (J.M.)	0.70	0.48	2.9317	0.0579
Silgan Holdings	0.70	0.54	2.8924	0.0571
Suburban Propane	0.75	0.54	3.0951	0.0611
Stericycle Inc.	0.65	0.47	2.8457	0.0562
Waste Connections	0.70	0.54	2.7563	0.0544
Weis Markets	0.65	0.44	2.7704	0.0547
Berkley (W.R.)	0.70	0.47	2.8399	0.0560
Average	0.69	0.49	2.9042	0.0573
Proxy Group of Nine Water				
Companies	0.69	0.48	2.9304	0.0578

Carolina Water Services, Inc. Summary of Cost of Equity Models Applied to the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the Proxy Group of Nine Water Companies

Principal Methods		Proxy Group o Twenty-Eight No Price-Regulated Companies	n-
Discounted Cash Flow Model (1)	•	11.57	%
Risk Premium Model (2)		10.32	%
Capital Asset Pricing Model (3)	-	9.90	%
	Average	10.60	%
	Median	10.32	%
Average of Average an	d Median	10.46	%

Notes:

- (1) From page 2 of this Schedule.
- (2) From page 3 of this Schedule.
- (3) From page 6 of this Schedule.

<u>Carolina Water Services, Inc.</u> DCF Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the Proxy Group of Nine Water Companies

Proxy Group of Twenty-Eight Non-Price-Regulated Companies	Average Dividend Yield	Value Line Projected Five Year Growth in EPS	Reuters Mean Consensus Projected Five Year Growth Rate in EPS	Zack's Five Year Projected Growth Rate in EPS	Yahoo! Finance Projected Five Year Growth in EPS	Average Projected Five Year Growth Rate in EPS	Adjusted Dividend Yield	Indicated Common Equity Cost Rate
Actavis, Inc.	- %	14.00 %	21.00 %	19.10 %	21.93 %	19.01 %	- %	NA %
Gallagher (Arthur J.	3.16	11.50	12.00	13.60	13.17	12.57	3.36	15.93
AutoZone Inc.		15.00	14.00	14.40	14.75	14.54	-	NA
Baxter Intl Inc.	2.85	8.50	8.10	8.90	8.13	8.41	2.97	11.38
Bristol-Myers Squibb	3.08	10.00	9.70	6.00	9.75	8.86	3.22	12.08
Brown & Brown	1.11	13.50	13.00	12.60	13.88	13.25	1.19	14.44
ConAgra Foods	3.10	11.00	8.70	10.40	8.70	9.70	3.25	12.95
Capitol Fed. Finl	2.40	6.00	3.50	3.50	3.50	4.13	2.45	6.58
Dun & Bradstreet	1.53	5.00	8.80	9.80	8.85	8.11	1.60	9.71
DaVita Inc.	-	15.00	12.00	12.80	11.60	12.85	-	NA
J&J Snack Foods	0.80	9.00	10.00	10.00	10.00	9.75	0.84	10.59
Kroger Co.	1.51	10.50	9.00	7.40	9.07	8.99	1.58	10.57
Lancaster Colony	2.02	7.00	NA	NA	10.00	8.50	2.11	10.61
McKesson Corp.	0.61	10.50	15.00	13.00	13.00	12.88	0.65	13.53
Mercury General	5.27	8.00	2.10	2.10	2.10	3.58	5.37	8.95
Annaly Capital Mgmt.	13.89	(2.50)	NA	3.50	3.50	3.50	14.13	17.63
Northwest Bancshares, Inc.	3.84	8.50	5.00	5.00	5.00	5.88	3.96	9.84
Owens & Minor	2.72	6.00	13.00	9.00	13.00	10.25	2.86	13.11
Peoples United Fin	4.53	17.50	7.40	6.50	7.13	9.63	4.75	14.38
Raytheon Co.	2.86	4.50	8.70	8.80	8.70	7.68	2.97	10.65
Sherwin-Williams	1.12	15.50	14.00	14.60	14.55	14.66	1.20	15.86
Smucker (J.M.)	1.93	8.50	8.70	8.30	8.77	8.57	2.01	10.58
Silgan Holdings	1.19	10.50	10.00	10.60	10.60	10.43	1.25	11.68
Suburban Propane	7.53	6.00	3.00	3.00	3.00	3.75	7.67	11.42
Stericycle Inc.	-	12.00	16.00	16.00	16.00	15.00	-	NA
Waste Connections	0.91	12.00	11.00	14.90	11.00	12.23	0.96	13.19
Weis Markets	2.45	3.50	NA	NA	NA	3.50	2.50	6.00
Berkley (W.R.)	0.94	12.50	7.90	9.50	6.91	9.20	0.99	10.19
							Average	11.74_%
							Median	11.40 %
					Averaç	ge of Average and Me	edian Results:	<u>11.57</u> %

NA= Not Available NMF= Not Meaningful Figure

(1) Mr. D'Ascendis's application of the DCF model to the domestic, non-price regluated comparable risk companies is identical to the application of the DCF to his proxy group of water companies. He uses the 60 day average price and the spot indicated dividend as of October 31, 2013 for his dividend yield and then adjusts that yield for 1/2 the average projected growth rate in EPS, which is calculated by averaging the 5 year projected growth in EPS provided by Value Line, www.reuters.com, www.zacks.com, and www.yahoo.com (excluding any negative growth rates) and then adding that growth rate to the adjusted dividend yield.

Source of Information:

Value Line Investment Survey: www.reuters.com Downloaded on 11/01/2013 www.zacks.com Downloaded on 11/01/2013 www.yahoo.com Downloaded on 11/01/2013

Carolina Water Services, Inc. Indicated Common Equity Cost Rate Through Use of a Risk Premium Model Using an Adjusted Total Market Approach

Line No.			Proxy Group of Twenty-Eight Non- Price-Regulated Companies
1.		Prospective Yield on Baa Rated Corporate Bonds (1)	5.65 %
2.		Equity Risk Premium (2)	4.67
3.		Risk Premium Derived Common Equity Cost Rate	10.32 %
Notes:	(1)	Average forecast based upon estimates of Baabonds per the consensus of nearly 50 economic Chip Financial Forecasts dated June 1, 2013 at 2013 (see pages 9 and 10 of Schedule 5). The detailed below.	sts reported in Blue and November 1,
		Fourth Quarter 2013 First Quarter 2014 Second Quarter 2014 Third Quarter 2014 Fourth Quarter 2014 First Quarter 2015 2015-2019 2020-2024	5.40 % 5.50 5.60 5.70 5.80 5.90 6.90 7.40
		Average	5.65 %

(2) From page 5 of this Schedule.

Carolina Water Services, Inc. Comparison of Bond Ratings for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the Proxy Group of Nine Water Companies

Moody's
Bond Rating
November 2013

Standard & Poor's Bond Rating November 2013

Non-Price-Regulated	Bond	Numerical	Bond	Numerical
Companies	Rating	Weighting (1)	Rating	Weighting (1)
Actavis, Inc.	Baa3	10.0	NR	
Gallagher (Arthur J.)	NR		NR	
AutoZone Inc.	Baa2	9.0	BBB	9.0
Baxter Intl Inc.	A3	7.0	Α	6.0
Bristol-Myers Squibb	A2	6.0	A+	5.0
Brown & Brown	NR		NR	
ConAgra Foods	Baa2	9.0	BBB-	10.0
Capitol Fed. Finl	NR		NR	
Dun & Bradstreet	NR		NR	
DaVita Inc.	Ba3	13.0	В	15.0
J&J Snack Foods	NR		NR	
Kroger Co.	Baa2	9.0	BBB	9.0
Lancaster Colony	NR		NR	
McKesson Corp.	Baa2	9.0	A-	7.0
Mercury General	NR		NR	
Annaly Capital Mgmt.	NR		NR	
Northwest Bancshares	NR		NR	
Owens & Minor	Ba1	11.0	BBB	9.0
Peoples United Finl	A2	6.0	NR	
Raytheon Co.	A3	7.0	A-	7.0
Sherwin-Williams	A3	7.0	Α	6.0
Smucker (J.M.)	A3	7.0	NR	
Silgan Holdings	Ba1	11.0	BB-	13.0
Suburban Propane	Ba3	13.0	BB-	13.0
Stericycle Inc.	NR		NR	
Waste Connections	NR		NR	
Weis Markets	NR		NR	
Berkley (W.R.)	Baa2	9.0	BBB+	8.0
Average	Baa2	8.9	BBB	9.0

Notes:

(1) From page 5 of Schedule 5.

Source of Information:

Standard & Poor's Bond Guide October 2013 www.moodys.com; downloaded 11/1/2013

Carolina Water Services, Inc. Derivation of Equity Risk Premium Based on the Total Market Approach Using the Beta for the Proxy Group of Non-Price-Regulated Companies Proxy Group of Nine Water Companies

Line No.		Proxy Group of Twenty-Eight Nor Price-Regulated Companies	n-
	Based on SBBI Valuation Yearbook Data:		
1.	Ibbotson Equity Risk Premium (1)	5.60	%
2.	Ibbotson Equity Risk Premium based on PRPM [™] (2)	9.22	
	Based on Value Line Summary and Index:		
3.	Equity Risk Premium Based on Value Line Summary and Index (3)	5.19	
4.	Conclusion of Equity Risk Premium (4)	6.67	%
5.	Adjusted Value Line Beta (5)	0.70	
6.	Forecasted Equity Risk Premium	4.67	%

Notes:

- (1) Based on the arithmetic mean historical monthly returns on large company common stocks from lbbotson[®] SBBI[®] 2013 Valuation Yearbook Market Results for Stocks, Bonds, Bills, and Inflation minus the arithmetic mean monthly yield of Moody's Aaa and Aa corporate bonds from 1926 2012. (11.83% 6.23% = 5.60%).
- (2) The Predictive Risk Premium Model (PRPMTM) is discussed in Mr. D'Ascendis's accompanying direct testimony. The Ibbotson equity risk premium based on the PRPMTM is derived by applying the PRPMTM to the monthly risk premiums between Ibbotson large company common stock monthly returns minus the average Aaa and Aa corporate monthly bond yields, from January 1928 through September 2013.
- (3) From page 8 of Schedule 5.
- (4) Average of Lines 1, 2, & 3.
- (5) Median beta derived from page 6 of this Schedule.

Sources of Information:

Ibbotson® SBBI® 2013 Valuation Yearbook - Market Results for Stocks, Bonds, Bills, and Inflation, Morningstar, Inc., 2013 Chicago, IL.

Value Line Summary and Index
Blue Chip Financial Forecasts, June 1 and November 1, 2013

<u>Carolina Water Services, Inc.</u> Traditional CAPM and ECAPM Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the Proxy Group of Nine Water Companies

Proxy Group of Twenty-Eight Non-Price-Regulated Companies	Value Line Adjusted Beta	Market Risk Premium (1)	Risk-Free Rate (2)	Traditional CAPM Cost Rate (3)	ECAPM Cost Rate (4)	Indicated Common Equity Cost Rate (5)
Actavis, Inc.	0.70	7.61 %	4.31 %	9.64 %	10.21 %	
Gallagher (Arthur J.)	0.75	7.61	4.31	10.02	10.49	
AutoZone Inc.	0.65	7.61	4.31	9.26	9.92	
Baxter Intl Inc.	0.70	7.61	4.31	9.64	10.21	
Bristol-Myers Squibb	0.70	7.61	4.31	9.64	10.21	
Brown & Brown	0.70	7.61	4.31	9.64	10.21	
ConAgra Foods	0.65	7.61	4.31	9.26	9.92	
Capitol Fed. Finl	0.60	7.61	4.31	8.88	9.64	
Dun & Bradstreet	0.75	7.61	4.31	10.02	10.49	
DaVita Inc.	0.65	7.61	4.31	9.26	9.92	
J&J Snack Foods	0.70	7.61	4.31	9.64	10.21	
Kroger Co.	0.60	7.61	4.31	8.88	9.64	
Lancaster Colony	0.70	7.61	4.31	9.64	10.21	
McKesson Corp.	0.75	7.61	4.31	10.02	10.49	
Mercury General	0.65	7.61	4.31	9.26	9.92	
Annaly Capital Mgmt.	0.65	7.61	4.31	9.26	9.92	
Northwest Bancshares	0.75	7.61	4.31	10.02	10.49	
Owens & Minor	0.75	7.61	4.31	10.02	10.49	
Peoples United Finl	0.65	7.61	4.31	9.26	9.92	
Raytheon Co.	0.75	7.61	4.31	10.02	10.49	
Sherwin-Williams	0.65	7.61	4.31	9.26	9.92	
Smucker (J.M.)	0.70	7.61	4.31	9.64	10.21	
Silgan Holdings	0.70	7.61	4.31	9.64	10.21	
Suburban Propane	0.75	7.61	4.31	10.02	10.49	
Stericycle Inc.	0.65	7.61	4.31	9.26	9.92	
Waste Connections	0.70	7.61	4.31	9.64	10.21	
Weis Markets	0.65	7.61	4.31	9.26	9.92	
Berkley (W.R.)	0.70	7.61	4.31	9.64	10.21	
Average	0.69			9.56 %	10.15 %	9.86 %
Median	0.70			9.64 %	10.21 %	9.93 %
			Average	of Average and Mo	edian Results:	9.90 %

Notes:

- (1) From Schedule 6, page 2, note 1.
- (2) From Schedule 6, page 2, note 2.(3) Derived from the model shown on Schedule 6, page 2, note 3.
- (4) Derived from the model shown on Schedule 6, page 2, note 4.
 (5) Average of CAPM and ECAPM cost rates.

Carolina Water Services, Inc. Derivation of Investment Risk Adjustment Based upon Ibbotson Associates' Size Premia for the Decile Portfolios of the NYSE/AMEX/NASDAQ

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Line No.

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			Applicable Decile of	:	Spread from
	Market Capitalization on October 31, 2013 (1) (millions) (times larger)	ation on October 13 (1) (times larger)	the NYSE/AMEX/ NASDAQ (2)	Applicable Size Premium (3)	Applicable Size Premium for (4)
Carolina Water Services, Inc.					
Based Upon the Proxy Group of Nine Water Companies	\$ 25.992		10	6.03%	
Proxy Group of Nine Water Companies	\$ 1,740.082	× 6.99	Ø	1.72%	4.31%
	(A)	(B)	(C)	(D)	(E)
		9 0	F	Recent Average	Size Premium (Return in
	Decile	Companies	Recent Total Market Capitalization	Narket Capitalization	Excess of CAPM) (2)
		(millions)	(millons)	(millons)	
Largest	~	173	\$ 10,255,341.469	\$ 59,279.430	-0.37%
	0.0	193	2,219,118.548	_	0.76%
	ω 4	187 202	1,072,861.025	\$ 5,737.225	0.92%
	cy -	205	473,139.360		1.70%
	9	234	377,485.205		1.72%
	_	317	329,504.738	,	1.73%
	∞ α	329	214,084.238		2.46%
Smallest	9	466 1068	106,706.095	357.743	2.70% 6.03%
	2	2		ı Ibbot	
Notes:					
(1)		s Schedule. umn (D) on the bottom	From Page 2 of this Schedule. Gleaned from Column (D) on the bottom of this page. The appropriate decile (Column (A)) corresponds to the	tte decile (Column (A))	corresponds to the
		on of the proxy group, w	market capitalization of the proxy group, which is found in Column 1.		Pag
(8)		t premium to the decile is	Corresponding risk premium to the decile is provided on Column (E) on the bottom of this page.	the bottom of this page.	200 C comile

(4) Line No. 1a Column 3 – Line No. 2 Column 3 and Line No. 1b, Column 3 – Line No. 3 of Column 3 etc.. For example, the 4.31% in Column 4, Line No. 2 is derived as follows 4.31% = 6.03% - 1.72%.

Carolina Water Services, Inc. Market Capitalization of Carolina Water Services, Inc. and the Proxy Group of Nine Water Companies

	tet 1, 2013		25.992 (6)		,095.752	,587.476	4,411.765	179.492	913.599	350.611	327.430	527.070	267.545	1,740.082
9	Market Capitalization on October 31, 2013 (3) (millions)		€		\$ 1,0	\$ 7,5	\$ 4,4			8		\$	\$	\$ 1,7
ιοι	Market-to-Book Ratio on October 31, 2013 (2)		211.5 % (5)		241.0 %	170.7	318.4	151.9	192.9	188.4	180.3	191.9	268.0	211.5 %
41	Closing Stock Market Price on October 31, 2013	NA			28.480	42.870	25.180	22.900	21.800	32.050	20.730	28.230	20.710	26.994
	Ma	<u>4</u>			↔	↔	ઝ	s	↔	↔	↔	↔	ક્ક	↔
ကା	Total Common Equity at Fiscal Year End 2012 (millions)	12.289 (4)			454.579	4,444.988	1,385.704	118.180	473.712	186.121	181.632	274.604	99.825	846.594
	Total C Fiscal	€			s	s	ક્ર	ક્ર	↔	↔	↔	↔	₩	↔
2 I	Book Value per Share at Fiscal Year End 2012 (1)	NA			11.815	25.115	7.909	15.078	11.304	17.014	11.499	14.708	7.727	13.574
	Sh				ક્ર	ઝ	છ	ઝ	ક	ક	ક્ર	ક	↔	€9
⊏ I	Common Stock Shares Outstanding at Fiscal Year End 2012 (millions)	NA			38.474	176.988	175.209	7.838	41.908	10.939	15.795	18.671	12.919	55.416
	Exchange													
	Company	Carolina Water Services, Inc.	Based Upon the Proxy Group of Nine Water Companies	Proxy Group of Nine Water Companies	American States Water Co.	American Water Works Co., Inc.	Aqua America, Inc.	Artesian Resources Corp.	California Water Service Group	Connecticut Water Service, Inc.	Middlesex Water Company	SJW Corporation	York Water Company	Average

NA= Not Available

Notes: (1) Column 3 / Column 2.
(2) Column 4 / Column 2.
(3) Column 5 * Column 3.
(4) Total combined rate base of Carolina Water Services, Inc. allocated by the recommended common equity ratio. (\$25.8M x 47.56% = \$12.289M)

(2)

The market-to-book ratio of Carolina Water Services, Inc. on October 31, 2013 is assumed to be equal to the market-to-book ratio of the Proxy Group of Nine Water Companies at October 31, 2013.

Carolina Water Services, Inc.'s common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at October 31, 2013 of the Proxy Group of Nine Water Companies, 211.5%, and Carolina Water Services, Inc.'s market capitalization on October 31, 2013 would therefore have been \$25,992 million. (9)

Source of Information: 2012 Annual Forms 10K yahoo.finance.com